Météo-France : common filters & processing used in OULAN/BATOR (based on CY38t1_op1)

1) blaklisting (Bator)

- To avoid model forecast degradation, these two files are used to remove from the analysis (ARPEGE, ALADIN, AROME ...) observations of poor quality. They are also used to blacklist observations that the model cannot deal with because they are too far from its real world representation (orography, breeze effects...).
  The reason for the existence of this method of 'blacklisting', built-in Bator, alongside with 'mf_blacklist.b' (built-in screening) is to allow simple and quick changes (and especially without changing binary) in the operational suite.
  The selection of an observation to be 'blacklisted' can be done using multi-criteria (SID / STATID, obstype, codetype, varno, channel / level, production center, sub-center producer, network (s) concerned (s), cycle (prod / assim), ..).
- liste_loc file : used for satellite data and also for type and / or subtype whole obs for a given parameter (described by varno or not),
- liste_diap: used for all data but satellite data.

2) Lamflag (Bator)

- Eliminates observations outside the model domain (AROME, ALADINS).

3) Pre-processing for conventional data (BdM & Oulan)

- A pre-processing is done before inserting observational data in the 'BdM' operational data base that produces quality flags. These controls have been taken from ECMWF (1989 fortran code and climatologic tables).
- When extracting data, the task 'Oulan' rejects an observation when its position, height, or pressure is flagged incorrect. It also rejects parameters having bad quality flag.